

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): ~~Electrically~~ An electrically controllable device ~~having~~ with variable optical/energy properties in transmission or in reflection, ~~characterized in that it~~ ~~is made as~~ comprising a single self-supporting film, the said film being formed from a polymerized blend of at least a first element suitable for providing a blend with an electrochromic functionality and at least a second element suitable for providing an electrolyte functionality for transporting ionic charges within the said blend.

Claim 2 (Currently Amended): ~~Device~~ The device according to Claim 1, ~~characterized in that~~ wherein the blend constitutes a single matrix that is obtained by simultaneous polymerization of the first and second elements.

Claim 3 (Currently Amended): ~~Device~~ The device according to Claim 1, ~~characterized in that~~ wherein the blend constitutes a single matrix that is obtained by successive polymerization of the first and second elements.

Claim 4 (Currently Amended): ~~Device~~ The device according to either of Claims 1 and 2, ~~characterized in that~~ Claim 1, wherein the first element is a conductive polymer.

Claim 5 (Currently Amended): ~~Device~~ The device according to Claim 4, ~~characterized in that~~ wherein the first element is a polymer based on a 3,4-alkylene dioxythiophene or one of its derivatives.

Claim 6 (Currently Amended): ~~Device~~ The device according to Claim 4,
~~characterized in that~~ wherein the first element is a polymer based on carbazole or one of its derivatives.

Claim 7 (Currently Amended): ~~Device~~ The device according to Claim 1,
~~characterized in that~~ wherein the first element is a blend of at least two electrochromic materials, at least one having an anodic coloration, the other having a cathodic coloration.

Claim 8 (Currently Amended): ~~Device~~ The device according to Claim 7,
~~characterized in that~~ wherein the material having a cathodic coloration is a bipyridine salt.

Claim 9 (Currently Amended): ~~Device~~ The device according to Claim 7,
~~characterized in that~~ wherein the material having an anodic coloration is based on 5,10-phenazine or one of its derivatives.

Claim 10 (Currently Amended): ~~Device~~ The device according to ~~one of Claims 1 to 3,~~ Claim 1, wherein the second element is a polymer chosen from polyoxyalkylenes.

Claim 11 (Currently Amended): ~~Device~~ The device according to Claim 10,
~~characterized in that~~ wherein the second element is chosen from polyoxyethylenes or one of its derivatives.

Claim 12 (Currently Amended): ~~Device~~ The device according to either of Claims 10 and 11, characterized in that Claim 10, wherein the second element is based on difunctional poly(ethylene glycol) or one of its derivatives.

Claim 13 (Currently Amended): ~~Device~~ The device according to one of Claims 1 to 12, characterized in that Claim 1, wherein the self-supporting film includes at least one third element suitable for improving its mechanical integrity or for improving the ionic conductivity.

Claim 14 (Currently Amended): ~~Device~~ The device according to Claim 13, characterized in that wherein the third element is a polymer chosen especially selected from the group consisting of polyacrylates, polymethacrylates, polycarbonates, polyacetates, polyurethanes, cellulosics, etc and mixtures thereof.

Claim 15 (Currently Amended): ~~Device~~ The device according either of Claims 13 and 14, characterized in that to Claim 13, wherein the third element is based on diethylene glycol diallyl carbonate or one of its derivatives, or else poly(ethylene glycol) methyl ether methacrylate.

Claim 16 (Currently Amended): ~~Device~~ The device according to any one of Claims 1 to 15, characterized in that Claim 1, wherein the film constitutes an interpenetrating network.

Claim 17 (Currently Amended): ~~Device~~ The device according to any one of Claims 1 to 15, characterized in that Claim 1, wherein the film constitutes a semi-interpenetrating network.

Claim 18 (Currently Amended): ~~Device~~ The device according to ~~one of Claims 1 to 16, characterized in that it~~ Claim 1, wherein the device has a gradient in the composition of the first element along a characteristic dimension of the film.

Claim 19 (Currently Amended): ~~System incorporating~~ A system comprising at least one device according to ~~any one of the preceding claims, characterized in that it furthermore includes~~ Claim 1, wherein the system further comprises at least one carrier substrate, wherein the said device being ~~is~~ placed between ~~two current leads, namely the~~ a lower current lead and the an upper current lead ~~respectively (“lower” corresponding to the current~~ wherein the lower current lead is closest to the carrier substrate, ~~as opposed to the “upper” lead which and the upper current lead~~ is furthest from the said carrier substrate[D]).

Claim 20 (Currently Amended): ~~System~~ The system according to Claim 19, ~~characterized in that it~~ wherein the system is an electrochromic or viologen-based system.

Claim 21 (Currently Amended): ~~System~~ The system according to ~~either of Claims 19 and 20, characterized in that it~~ Claim 19, wherein the system constitutes a vehicle sunroof, that can be autonomously actuated, or a vehicle side window or rear window, or a rearview mirror.

Claim 22 (Currently Amended): ~~System~~ The system according to ~~either of Claims 19 or 20, characterized in that it~~ Claim 19, wherein the system constitutes a windscreen or a portion of a windscreen.

Claim 23 (Currently Amended): ~~System~~ The system according to either of Claims 19 and 20, characterized in that it Claim 19, wherein the system constitutes a graphical and/or alphanumeric data display panel, glazing for buildings, a rearview mirror, an aircraft windshield or cabin window, or a roof window.

Claim 24 (Currently Amended): ~~System~~ The system according to either of Claims 19 and 20, characterized in that it Claim 19, wherein the system constitutes:

- interior or exterior glazing for buildings;
- a shop showcase or countertop display case, which may be curved;
- glazing for protecting an object of the painting type;
- an antiglare computer screen;
- glass furniture;
- a wall separating two rooms inside a building or two compartments in a motor vehicle.

Claim 25 (Currently Amended): ~~System~~ The system according to any one of Claims 19 to 24, characterized in that it Claim 19, wherein the system operates in transmission or in reflection.

Claim 26 (Currently Amended): ~~System~~ The system according to one of Claims 19 to 25, characterized in that Claim 19, wherein the substrate is transparent, flat or curved, clear or bulk-tinted, and of polygonal shape or at least partly curved.

Claim 27 (Currently Amended): ~~System~~ The system according to one of Claims 19 to 26, characterized in that Claim 19, wherein the substrate is opaque or opacified.

Claim 28 (Currently Amended): ~~System~~ The system according to ~~one of Claims 19 to 27, characterized in that it~~ Claim 19, wherein the system incorporates another functionality.

Claim 29 (Currently Amended): ~~Process~~ A process for obtaining a producing the device according to ~~any one of Claims 1 to 18, characterized in that~~ Claim 1, wherein:

- optionally, the second element is blended with the third element in the presence of a polymerization initiator;
- the polymerization of the second element is carried out by thermal activation of the blend, and the thermal activation of the blend is continued until the third element has polymerized; and
- the second and third elements are polymerized or copolymerized in a step by thermal activation of the blend.

Claim 30 (Currently Amended): ~~Obtaining~~ The process according to Claim 29, characterized in that wherein:

- the first element is added to the blend of the second and third elements;
- the first element is polymerized, by immersion of the blend, with the aid of a polymerization initiator; and
- the blend is rinsed.

Claim 31 (Currently Amended): ~~Process~~ The process according to Claim 29, characterized in that wherein:

- the polymerized blend of the second and third elements is brought into contact in a bath based on the first element;

- the first element is polymerized, by immersion of the blend, with the aid of a polymerization initiator; and
- the blend is rinsed.

Claim 32 (Currently Amended): ~~Process~~ The process according to ~~one of Claims 29 to 31, characterized in that~~ Claim 29, wherein the film is impregnated with an Li⁺ salt, or one based on another cation, and optionally with a plasticizer.

Claim 33 (Currently Amended): ~~Process~~ The process according to ~~one of Claims 29 to 31, characterized in that~~ Claim 29, wherein the impregnation of the film is carried out during the film production steps, by incorporating a charge provider into the blend of monomers of the three elements.